



# Our Region's Largest Classroom!

Reading | Grades PreK-K | Winter 2021



Learning goals were written by



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## Guidance for Reading

**As educators, we know the importance of literacy instruction in the classroom. While this is a different avenue to instruction, please note the following:**

1. Reading, writing, speaking and listening. These four components are the foundations of a great literacy lesson and should be included in each segment.
2. Reading instruction should be included in a variety of ways from a read-aloud, shared reading, choral reading to independent reading. This will depend on the literature and standard selection for the lesson.
3. The incorporation of writing should be a seamless and logical addition throughout the lesson. The writing should support and link the reading standards to the literature and not used as a separate part of the lesson.
4. Speaking and listening opportunities should be incorporated into the lesson at various times throughout the literature.
5. Research shows vocabulary instruction is a predictor of reading achievement. As many of our students struggle with vocabulary, it is included in every session over the 14 weeks. This vocabulary instruction is not the spelling and/or memorization of the vocabulary word but rather the standards listed within the Big Idea/Concept of Vocabulary in the English Language Arts Missouri Learning Standards R.1.B.
6. Quality of literature selected. Students can comprehend literature read aloud to them up to two years above their tested reading level. Therefore, choose rich, challenging and complex selections to stimulate learning in the students.
7. The following suggested learning goals have been selected within the English Language Arts Missouri Learning Standards at the Big Idea/Concept Level. It is at the educator's discretion which standards to choose within the Big Idea/Concept according to the literature selected.

## Nine PBS | Teaching in Room 9 | Reading | Grades PreK & K | Winter 2021

### Jan. 11/Week 1: Language and Literacy: Concepts of Print

#### State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills to the reading process develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

### Jan. 18/Week 2: Language and Literacy: Listening

#### State Standards

Missouri Early Learning Standard Language and Literacy: Listens for different purposes

Kindergarten GLE English Language Arts: Listens for purpose, listens for entertainment

### Jan. 25/Week 3: Language and Literacy: Predictions

#### State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills to the reading process, develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

### Feb. 1/Week 4: Language and Literacy: Rhyming

#### State Standards

Missouri Early Learning Standard Language and Literacy: Attends to sounds in language

Kindergarten GLE English Language Arts: Develop and apply skills and strategies to comprehend, analyze, and evaluate non-fiction from a variety of cultures and times, comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning

**Feb. 8/Week 5: Language and Literacy: Environmental Print**

State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Missouri Early Learning Standard English Language Arts Develop and apply skills to the reading process develop and apply skills and strategies to comprehend, analyze, and evaluate non-fiction from a variety of cultures and times, comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning

**Feb. 15/Week 6: Language and Literacy-Characters**

State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Feb. 22: Rebroadcast Week**

**Mar. 1/Week 7: Language and Literacy: Settings**

State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Mar. 8/Week 8: Language and Literacy: Problem-Solution-Events**

State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Mar. 15/Week 9: Language and Literacy: Retell-Sequencing-Beginning-Middle-End**

State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Mar. 22/Week 10: Language and Literacy: Letters and Sounds**

State Standards

Missouri Early Learning Standard Language and Literacy: Attends to sounds in language, applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills to the reading process, develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Mar. 29/Rebroadcast Week**

**Apr. 5/Week 11: Language and Literacy: Letters and Sounds**

State Standards

Missouri Early Learning Standard Language and Literacy: Attends to sounds in language, applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills to the reading process, develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Apr. 12/Week 12: Language and Literacy: Illustrator Study**

State Standards

Missouri Early Learning Standard Language and Literacy: Applies early reading skills

Kindergarten GLE English Language Arts: Develop and apply skills to the reading process, develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**Apr. 19/Week 13: Language and Literacy: Non-Fiction**

**State Standards**

**Missouri Early Learning Standard Language and Literacy:** Applies Early Reading Skills, Listen for Different Purposes

**Kindergarten GLE English Language Arts:** Develop and apply skills to the reading process; develop and apply skills and strategies to comprehend, analyze, and evaluate non-fiction, from a variety of cultures and times; gather, analyze, and use information from a variety of sources

**Apr. 26/Week 14: Language and Literacy: Writing**

**State Standards**

**Missouri Early Learning Standard Language and Literacy:** Uses writing as a means of expression/communication

**Kindergarten GLE English Language Arts:** Understand how English is written and read; apply writing process to develop a text for audience and purpose



# Our Region's Largest Classroom!

Reading | Grades 1-2 | Winter 2021



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2. Reading instruction should be included in a variety of ways from a read-aloud, shared reading, choral reading to independent reading. This will depend on the literature and standard selection for the lesson.
3. The incorporation of writing should be a seamless and logical addition throughout the lesson. The writing should support and link the reading standards to the literature and not used as a separate part of the lesson.
4. Speaking and listening opportunities should be incorporated into the lesson at various times throughout the literature.
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## Nine PBS | Teaching in Room 9 | Reading | Grades 1 & 2 | Winter 2021

Jan. 11/Week 1	<b>Reading Foundations</b> Print Awareness
Lesson 1	RF.1.A Print Awareness
Lesson 2	RF.1.A Print Awareness
Lesson 3	RF.1.A Print Awareness
Lesson 4	RF.1.A Print Awareness
Jan. 18/Week 2	<b>Reading Foundations</b> Phonics
Lesson 5	RF.3.A Phonics–short vowels
Lesson 6	RF.3.A Phonics–long vowels
Lesson 7	RF.3.A Phonics–vowel digraphs
Lesson 8	RF.3.A Phonics–vowel diphthongs
Jan. 25/Week 3	<b>Reading Foundations</b> Phonics
Lesson 9	RF.3.A Phonics–short vowels
Lesson 10	RF.3.A Phonics–long vowels
Lesson 11	RF.3.A Phonics–vowel digraphs
Lesson 12	RF.3.A Phonics–vowel diphthongs
Feb. 1/Week 4	<b>Reading Foundations</b> Phonics
Lesson 13	RF.3.A Phonics–consonant blends
Lesson 14	RF.3.A Phonics–syllabication to decode words
Lesson 15	RF.3.A Phonics–reading high frequency words
Lesson 16	RF.3.A. Phonics–reading high frequency words
Feb. 8/Week 5	<b>Reading Foundations</b> Fluency
Lesson 17	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Lesson 18	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Lesson 19	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Lesson 20	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Feb. 15/Week 6	<b>Reading Foundations</b> Fluency
Lesson 21	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Lesson 22	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Lesson 23	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Lesson 24	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
<b>Feb. 22/Rebroadcast Week</b>	
Mar. 1/Week 7	<b>Reading</b> Vocabulary
Lesson 25	R.1.B Vocabulary–affixes
Lesson 26	R.1.B Vocabulary–root words
Lesson 27	R.1.B. Vocabulary–suffixes/inflectional endings
Lesson 28	R.1.B. Vocabulary–compound words
Mar. 8/Week 8	<b>Reading</b>

	Vocabulary
Lesson 29	R.1.B Vocabulary–context clues
Lesson 30	R.1.B Vocabulary–context clues
Lesson 31	R.1.B Vocabulary–context clues
Lesson 32	R.1.B Vocabulary–context clues
Mar. 15/Week 9	<b>Reading</b> Vocabulary
Lesson 33	R.1.B. Vocabulary–shades of meaning
Lesson 34	R.1.B Vocabulary–shades of meaning
Lesson 35	R.1.B Vocabulary–literal/nonliteral meanings
Lesson 36	R.1.B Vocabulary–literal/nonliteral meanings
Mar. 22/Week 10	<b>Reading</b> Fiction
Lesson 37	R.2.A Fiction–character actions
Lesson 38	R.2.A Fiction–characters experiences
Lesson 39	R.2.A Fiction–describe characters
Lesson 40	R.2.A Fiction–characters point of view
<b>Mar. 29/Rebroadcast Week</b>	
Apr. 5/Week 11	<b>Reading</b> Fiction
Lesson 41	R.2.A. Fiction–compare versions of same story–characters
Lesson 42	R.2.A Fiction –compare versions of same story–setting
Lesson 43	R.2.A. Fiction–compare versions of same story–events
Lesson 44	R.2.A Fiction–compare versions of same story–narrator
Apr. 12/Week 12	<b>Reading</b> Fiction
Lesson 45	R.2.A. Fiction–contrast versions of same story–characters
Lesson 46	R.2.A Fiction –contrast versions of same story–setting
Lesson 47	R.2.A. Fiction–contrast versions of same story–events
Lesson 48	R.2.A Fiction–contrast versions of same story–narrator
Apr. 19/Week 13	<b>Reading</b> Poetry
Lesson 49	R.2.B Poetry
Lesson 50	R.2.B Poetry
Lesson 51	R.2.B Poetry
Lesson 52	R.2.B Poetry
Apr. 26/Week 14	<b>Reading</b> Drama
Lesson 49	R.2.C Drama
Lesson 50	R.2.C Drama
Lesson 51	R.2.C Drama
Lesson 52	R.2.C Drama



# Our Region's Largest Classroom!

Reading | Grade 3 | Winter 2021



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More information and resources at [ninepbs.org/learningtoolkit](https://ninepbs.org/learningtoolkit)



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Jan. 11/Week 1	<b>Reading Foundations</b> Phonics
Lesson 1	RF.3.A Phonics–short vowels
Lesson 2	RF.3.A Phonics–long vowels
Lesson 3	RF.3.A Phonics–vowel digraphs
Lesson 4	RF.3.A Phonics–vowel diphthongs
Jan. 18/Week 2	<b>Reading Foundations</b> Phonics
Lesson 5	RF.3.A Phonics–homophones
Lesson 6	RF.3.A Phonics–double final consonants
Lesson 7	RF.3.A Phonics–decoding with spelling patterns
Lesson 8	RF.3.A Phonics–decoding with spelling patterns
Jan. 25/Week 3	<b>Reading Foundations</b> Phonics
Lesson 9	RF.3.A Phonics–decoding multisyllabic words
Lesson 10	RF.3.A Phonics–decoding multisyllabic words
Lesson 11	RF.3.A Phonics–reading high frequency words
Lesson 12	RF.3.A. Phonics–reading high frequency words
Feb. 1/Week 4	<b>Reading Foundations</b> Fluency
Lesson 13	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Lesson 14	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Lesson 15	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Lesson 16	RF.4.A. Fluency–rate, accuracy, expression, appropriate phasing
Feb. 8/Week 5	<b>Reading Foundations</b> Fluency
Lesson 17	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Lesson 18	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Lesson 19	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Lesson 20	RF.4.A. Fluency–confirm/self-correct word recognition and understanding
Feb. 15/Week 6	<b>Reading</b> Vocabulary
Lesson 21	R.1.B Vocabulary–decoding with prefixes
Lesson 22	R.1.B Vocabulary–decoding root words
Lesson 23	R.1.B. Vocabulary–decoding with suffixes/inflectional endings
Lesson 24	R.1.B. Vocabulary–homographs/homophones
<b>Feb. 22/Rebroadcast Week</b>	
Mar. 1/Week 7	<b>Reading</b> Vocabulary
Lesson 25	R.1.B Vocabulary–context clues
Lesson 26	R.1.B Vocabulary–context clues
Lesson 27	R.1.B Vocabulary–context clues
Lesson 28	R.1.B Vocabulary–context clues
Mar. 8/Week 8	<b>Reading</b>

	Vocabulary
Lesson 29	R.1.B. Vocabulary–meaning from similes
Lesson 30	R.1.B Vocabulary–meaning from metaphors
Lesson 31	R.1.B Vocabulary–literal/nonliteral meanings
Lesson 32	R.1.B Vocabulary–literal/nonliteral meanings
Mar. 15/Week 9	<b>Reading</b> Fiction
Lesson 33	R.2.A Fiction–describe personality traits by character actions
Lesson 34	R.2.A Fiction–describe interactions of characters and experiences
Lesson 35	R.2.A Fiction–explain cause/effect relationships
Lesson 36	R.2.A Fiction–characters point of view vs. own
Mar. 22/Week 10	<b>Reading</b> Fiction
Lesson 37	R.2.A. Fiction–compare versions of same story –characters
Lesson 38	R.2.A Fiction–compare versions of same story–setting
Lesson 39	R.2.A. Fiction–compare versions of same story–events
Lesson 40	R.2.A Fiction–compare versions of same story–narrator
	<b>Mar. 29/Rebroadcast Week</b>
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Lesson 41	R.2.A. Fiction–contrast versions of same story –characters
Lesson 42	R.2.A Fiction –contrast versions of same story–setting
Lesson 43	R.2.A. Fiction–contrast versions of same story–events
Lesson 44	R.2.A Fiction–contrast versions of same story–narrator
Apr. 12/Week 12	<b>Reading</b> Fiction and Nonfiction
Lesson 45	R.2.A Fiction–paraphrase the main idea
Lesson 46	R.2.A Fiction–paraphrase supporting details
Lesson 47	R.3.A Nonfiction–paraphrase the main idea
Lesson 48	R.3.A Nonfiction–paraphrase supporting details
Apr. 19/Week 13	<b>Reading</b> Poetry
Lesson 49	R.2.B Poetry
Lesson 50	R.2.B Poetry
Lesson 51	R.2.B Poetry
Lesson 52	R.2.B Poetry
Apr. 26/Week 14	<b>Reading</b> Drama
Lesson 49	R.2.C Drama
Lesson 50	R.2.C Drama
Lesson 51	R.2.C Drama
Lesson 52	R.2.C Drama



# Our Region's Largest Classroom!

## Mathematics | Grades PreK-Grade 3 | Winter 2021



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## Guidance for Math: PreK-Grade 2

**As educators, we know the importance of numeracy instruction in the classroom. Please note the following:**

- Mathematics is a visual content.
- Patterns are the basis of mathematics.
- Cognitively guided instruction emphasizes a sequence from concrete experiences (using manipulatives) and representational modeling, resulting in abstract thinking.
- Mathematics should be related to real-world experiences appropriate to the age of the student.
- This outline was created with an emphasis on building numeracy with the number sense trajectory in mind, not memorization or procedural knowledge.
- The following suggested mathematics topics have been selected from within the Missouri Mathematics Learning Standards at the Domain/Cluster Level. It is at the educator's discretion which expectations to choose within the cluster level.

This information provided by the Washington University's ISP for Nine PBS's mathematics broadcast project. As this project does not seek to replace schooling, the guidance provided here is not intended for development of resources that replace continuous instruction provided by school districts.

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## Guidance for Math: Grade 3

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- Patterns are the basis of mathematics.
- Cognitively guided instruction emphasizes a sequence from concrete experiences (using manipulatives) and representational modeling, resulting in abstract thinking.
- Mathematics should be related to real-world experiences appropriate to the age of the student.
- This outline was created with an emphasis on building numeracy with the number sense trajectory in mind, not memorization or procedural knowledge.
- When working with fractions consider the following:
  - › Connect to whole number work, start with spatial.
  - › Limit fraction denominators to 2, 3, 4, 6, 8, 10, 12, and 100.
  - › Use unit fractions as basis for understanding.
  - › Multiple representations: regional/area (circles, rectangles, pattern blocks) and linear (fraction strips, number lines, bar models, relationship rods, etc.).
- Number computation should be addressed intuitively.
- Use a variety of models to represent operations and develop understanding of operations.
- The following suggested mathematics topics have been selected from within the Missouri Mathematics Learning Standards at the Domain/Cluster Level. It is at the educator's discretion which expectations to choose within the cluster level.

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Nine PBS | Teaching in Room 9 | Mathematics | Grades PreK & K | Winter 2021

Jan. 11/Week 1	<b>K.NS.A. Know number names and count sequence.</b> Embed K.NS.A.4 Read and write numerals and represent a number of objects from 0 to 20.
Monday	K.NS.A.1 Counting to 100 by ones
Tuesday	K.NS.A.1 Counting to 100 by ones
Wednesday	K.NS.A.1 Counting to 100 by tens
Thursday	K.NS.A.1 Counting to 100 by tens

Jan. 18/Week 2	<b>K.NS.A. Know number names and count sequence.</b> Embed K.NS.A.4 Read and write numerals and represent a number of objects from 0 to 20.
Monday	K.NS.A.2 Count forward beginning from a given number between 1 and 20.
Tuesday	K.NS.A.2 Count forward beginning from a given number between 1 and 20.
Wednesday	K.NS.A.3 Count backward from a given number between 10 and 1.
Thursday	K.NS.A.3 Count backward from a given number between 10 and 1.

Jan. 25/Week 3	<b>K.NS.B. Understand the relationship between numbers and quantities; connect counting to cardinality.</b> Embed K.NS.A.4 Read and write numerals and represent a number of objects from 0 to 20.
Monday	K.NS.B.6 Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in which they were counted.
Tuesday	K.NS.B.6 Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in which they were counted.
Wednesday	K.NS.B.6 Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in which they were counted.
Thursday	K.NS.B.6 Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or

	the order in which they were counted.
Feb. 1/Week 4	<b>K.NS.B. Understand the relationship between numbers and quantities; connect counting to cardinality.</b> Embed K.NS.A.4 Read and write numerals and represent a number of objects from 0 to 20.
Monday	K.NS.B.7 Demonstrate that each successive number name refers to a quantity that is one larger than the previous number.
Tuesday	K.NS.B.7 Demonstrate that each successive number name refers to a quantity that is one larger than the previous number.
Wednesday	K.NS.B.7 Demonstrate that each successive number name refers to a quantity that is one larger than the previous number.
Thursday	K.NS.B.7 Demonstrate that each successive number name refers to a quantity that is one larger than the previous number.

Feb. 8/Week 5	<b>K.NS.B. Understand the relationship between numbers and quantities; connect counting to cardinality.</b> Embed K.NS.A.4 Read and write numerals and represent a number of objects from 0 to 20.
Monday	K.NS.B.8 Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns. K.NS.B.9 Demonstrate that a number can be used to represent “how many” are in a set.
Tuesday	K.NS.B.8 Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns. K.NS.B.9 Demonstrate that a number can be used to represent “how many” are in a set.
Wednesday	K.NS.B.8 Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns. K.NS.B.9 Demonstrate that a number can be used to represent “how many” are in a set.
Thursday	K.NS.B.8 Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns. K.NS.B.9 Demonstrate that a number can be used to represent “how many” are in a set.

Feb. 15/Week 6	<b>K.NS.C Compare numbers.</b>
Monday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other.
Tuesday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than or less than the other.
Wednesday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other.
Thursday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other.

<b>Feb. 22/Rebroadcast Week</b>	
Mar. 1/Week 7	<b>K.NS.C Compare numbers.</b>
Monday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other. K.NS.C.11 Compare two numerals, between 1 and 10, and determine which is more than or less than the other.
Tuesday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other. K.NS.C.11 Compare two numerals, between 1 and 10, and determine which is more than or less than the other.
Wednesday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other. K.NS.C.11 Compare two numerals, between 1 and 10, and determine which is more than or less than the other.
Thursday	K.NS.C.10 Compare two or more sets of objects and identify which set is equal to, more than, or less than the other. K.NS.C.11 Compare two numerals, between 1 and 10, and determine which is more than or less than the other.

Mar. 8/Week 8	<b>K.GM.B Work with time and money.</b> K.GM.B.3 Demonstrate an understanding of concepts of time and devices that measure time. K.GM.B.4 Name the days of the week.
Monday	K.GM.B.3 Demonstrate an understanding of concepts of time and devices that

	measure time.
Tuesday	K.GM.B.3 Demonstrate an understanding of concepts of time and devices that measure time.
Wednesday	K.GM.B.4 Name the days of the week.
Thursday	K.GM.B.4 Name the days of the week.

Mar. 15/Week 9	<b>K.GM.B Work with time and money.</b>
Monday	K.GM.B.5 Identify pennies, nickels, dimes, and quarters
Tuesday	K.GM.B.5 Identify pennies, nickels, dimes, and quarters
Wednesday	K.GM.B.5 Identify pennies, nickels, dimes, and quarters
Thursday	K.GM.B.5 Identify pennies, nickels, dimes, and quarters

Mar. 22/Week 10	<b>K.DS.A Classify objects and count the number of objects in each category.</b> K.DS.A.1 Classify objects into given categories; count the number of objects in each category.
Monday	K.DS.A.1 Classify objects into given categories; count the number of objects in each category.
Tuesday	K.DS.A.1 Classify objects into given categories; count the number of objects in each category.
Wednesday	K.DS.A.1 Classify objects into given categories; count the number of objects in each category.
Thursday	K.DS.A.1 Classify objects into given categories; count the number of objects in each category.

<b>Mar. 29/Rebroadcast Week</b>	
Apr. 5/Week 11	<b>K.DS.A Classify objects and count the number of objects in each category</b> K.DS.A.2 Compare category counts using appropriate language.
Monday	K.DS.A.2 Compare category counts using appropriate language.
Tuesday	K.DS.A.2 Compare category counts using appropriate language.
Wednesday	K.DS.A.2 Compare category counts using appropriate language.

Thursday	K.DS.A.2 Compare category counts using appropriate language.
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Apr. 12/Week 12	<p><b>K.MP.5. Use appropriate tools strategically.</b>          Younger students begin to consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, kindergarteners may decide that it might be advantageous to use linking cubes to represent two quantities and then compare the two representations side-by-side.</p>
Monday	K.MP.5. Use appropriate tools strategically.
Tuesday	K.MP.5. Use appropriate tools strategically.
Wednesday	K.MP.5. Use appropriate tools strategically.
Thursday	K.MP.5. Use appropriate tools strategically.

Apr. 19/Week 13	<p><b>K.MP.7. Look for and make use of structure.</b>          Younger students begin to discern a pattern or structure. For instance, students recognize the pattern that exists in the teen numbers; every teen number is written with a 1 (representing one ten) and ends with the digit that is first stated. They also recognize that <math>3 + 2 = 5</math> and <math>2 + 3 = 5</math>.</p> <p><b>K.MP.8. Look for and express regularity in repeated reasoning.</b>          In the early grades, students notice repetitive actions in counting and computation, etc. For example, they may notice that the next number in a counting sequence is one more. When counting by tens, the next number in the sequence is “ten more” (or one more group of ten). In addition, students continually check their work by asking themselves, “Does this make sense?”</p>
Monday	<p>K.MP.7. Look for and make use of structure.          K.MP.8. Look for and express regularity in repeated reasoning.</p>
Tuesday	<p>K.MP.7. Look for and make use of structure.          K.MP.8. Look for and express regularity in repeated reasoning.</p>
Wednesday	<p>K.MP.7. Look for and make use of structure.          K.MP.8. Look for and express regularity in repeated reasoning.</p>
Thursday	<p>K.MP.7. Look for and make use of structure.          K.MP.8. Look for and express regularity in repeated reasoning.</p>

<p>Apr. 26/Week 14</p>	<p><b>K.MP.7. Look for and make use of structure.</b> Younger students begin to discern a pattern or structure. For instance, students recognize the pattern that exists in the teen numbers; every teen number is written with a 1 (representing one ten) and ends with the digit that is first stated. They also recognize that <math>3 + 2 = 5</math> and <math>2 + 3 = 5</math>.</p> <p><b>K.MP.8. Look for and express regularity in repeated reasoning.</b> In the early grades, students notice repetitive actions in counting and computation, etc. For example, they may notice that the next number in a counting sequence is one more. When counting by tens, the next number in the sequence is “ten more” (or one more group of ten). In addition, students continually check their work by asking themselves, “Does this make sense?”</p>
<p>Monday</p>	<p>K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.</p>
<p>Tuesday</p>	<p>K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.</p>
<p>Wednesday</p>	<p>K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.</p>
<p>Thursday</p>	<p>K.MP.7. Look for and make use of structure. K.MP.8. Look for and express regularity in repeated reasoning.</p>

Nine PBS | Teaching in Room 9 | Mathematics | Grades 1 & 2 | Winter 2021

Jan. 11/Week 1	<b>1.DS.A Represent and interpret data.</b> <b>2.DS.A Represent and interpret data.</b>
Monday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.1 Create a line plot to represent a set of numeric data, given a horizontal scale marked in whole numbers.
Tuesday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.2 Generate measurement data to the nearest whole unit, and display the data in a line plot.
Wednesday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.3 Draw a picture graph or a bar graph to represent a data set with up to four categories.
Thursday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.3 Draw a picture graph or a bar graph to represent a data set with up to four categories.

Jan. 18/Week 2	<b>1.DS.A Represent and interpret data.</b> <b>2.DS.A Represent and interpret data.</b>
Monday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.4 Solve problems using information presented in line plots, picture graphs and bar graphs.
Tuesday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.4 Solve problems using information presented in line plots, picture graphs and bar graphs.
Wednesday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.4 Solve problems using information presented in line plots, picture graphs and bar graphs.
Thursday	1.DS.A.1 Collect, organize, and represent data with up to three categories. 2.DS.A.4 Solve problems using information presented in line plots, picture graphs and bar graphs.

Jan. 25/Week 3	<b>2.DS.A.5 Draw conclusions from line plots, picture graphs, and bar graphs.</b>
Monday	1.DS.A.2 Draw conclusions from object graphs, picture graphs, T-charts, and tallies. 2.DS.A.5 Draw conclusions from line plots, picture graphs, and bar graphs.

Tuesday	1.DS.A.2 Draw conclusions from object graphs, picture graphs, T-charts, and tallies. 2.DS.A.5 Draw conclusions from line plots, picture graphs, and bar graphs.
Wednesday	1.DS.A.2 Draw conclusions from object graphs, picture graphs, T-charts, and tallies. 2.DS.A.5 Draw conclusions from line plots, picture graphs, and bar graphs.
Thursday	1.DS.A.2 Draw conclusions from object graphs, picture graphs, T-charts, and tallies. 2.DS.A.5 Draw conclusions from line plots, picture graphs, and bar graphs.

Feb. 1/Week 4	<b>1.GM.B Measure lengths in non-standard units.</b> <b>2.GM.B Measure and estimate lengths in standard units.</b>
Monday	1.GM.B.6 Compare the lengths of two objects indirectly by using a third object. 2.GM.B.4 Measure the length of an object by selecting and using appropriate tools.
Tuesday	1.GM.B.6 Compare the lengths of two objects indirectly by using a third object. 2.GM.B.4 Measure the length of an object by selecting and using appropriate tools.
Wednesday	1.GM.B.6 Compare the lengths of two objects indirectly by using a third object. 2.GM.B.4 Measure the length of an object by selecting and using appropriate tools.
Thursday	1.GM.B.6 Compare the lengths of two objects indirectly by using a third object. 2.GM.B.4 Measure the length of an object by selecting and using appropriate tools.

Feb. 8/Week 5	<b>1.GM.B Measure lengths in non-standard units.</b> <b>2.GM.B Measure and estimate lengths in standard units.</b>
Monday	1.GM.B.7 Demonstrate the ability to measure length or distance using objects. 2.GM.B.5 Analyze the results of measuring the same object with different units.
Tuesday	1.GM.B.7 Demonstrate the ability to measure length or distance using objects. 2.GM.B.5 Analyze the results of measuring the same object with different units.
Wednesday	1.GM.B.7 Demonstrate the ability to measure length or distance using objects. 2.GM.B.5 Analyze the results of measuring the same object with different units.
Thursday	1.GM.B.7 Demonstrate the ability to measure length or distance using objects. 2.GM.B.5 Analyze the results of measuring the same object with different units.

Feb. 15/Week 6	<b>1.NS.A Understand and use numbers up to 120.</b> <b>2.GM.D Work with time and money.</b>
Monday	1.NS.A.4 Count by 5s to 100 starting at any multiple of five. 2.GM.D.10 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

Tuesday	1.NS.A.4 Count by 5s to 100 starting at any multiple of five. 2.GM.D.10 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
Wednesday	1.NS.A.4 Count by 5s to 100 starting at any multiple of five. 2.GM.D.10 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
Thursday	1.NS.A.4 Count by 5s to 100 starting at any multiple of five. 2.GM.D.10 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

<b>Feb. 22/Rebroadcast Week</b>	
<b>Mar. 1/Week 7</b>	<b>1.GM.C Work with time and money.</b> <b>2.GM.D Work with time and money.</b>
Monday	1.GM.C.8 Tell and write time in hours and half-hours using analog and digital clocks. 2.GM.D.11 Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.
Tuesday	1.GM.C.8 Tell and write time in hours and half-hours using analog and digital clocks. 2.GM.D.11 Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.
Wednesday	1.GM.C.8 Tell and write time in hours and half-hours using analog and digital clocks. 2.GM.D.11 Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.
Thursday	1.GM.C.8 Tell and write time in hours and half-hours using analog and digital clocks. 2.GM.D.11 Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.

<b>Mar. 8/Week 8</b>	<b>1.GM.C Work with time and money.</b> <b>2.GM.D Work with time and money.</b>
Monday	1.GM.C.9 Know the value of a penny, nickel, dime, and quarter. 2.GM.D.13 Find combinations of coins that equal a given amount.
Tuesday	1.GM.C.9 Know the value of a penny, nickel, dime, and quarter. 2.GM.D.13 Find combinations of coins that equal a given amount.

Wednesday	1.GM.C.9 Know the value of a penny, nickel, dime, and quarter. 2.GM.D.13 Find combinations of coins that equal a given amount.
Thursday	1.GM.C.9 Know the value of a penny, nickel, dime, and quarter. 2.GM.D.13 Find combinations of coins that equal a given amount.

Mar. 15/Week 9	<p><b>1.MP.4. Model with mathematics.</b> In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.</p> <p><b>2.MP.4. Model with mathematics.</b> In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.</p>
Monday	MP.4. Model with mathematics.
Tuesday	MP.4. Model with mathematics.
Wednesday	MP.4. Model with mathematics.
Thursday	MP.4. Model with mathematics.

Mar. 22/Week 10	<p><b>1.MP.4. Model with mathematics.</b> In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.</p> <p><b>2.MP.4. Model with mathematics.</b> In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.</p>
Monday	MP.4. Model with mathematics.

Tuesday	MP.4. Model with mathematics.
Wednesday	MP.4. Model with mathematics.
Thursday	MP.4. Model with mathematics.

<b>Mar. 29/Rebroadcast Week</b>	
Apr 5/Week 11	<p><b>1.MP.5. Use appropriate tools strategically.</b> In first grade, students begin to consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, first graders decide it might be best to use colored chips to model an addition problem.</p> <p><b>2.MP.5. Use appropriate tools strategically.</b> In second grade, students consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be better suited. For instance, second graders may decide to solve a problem by drawing a picture rather than writing an equation.</p>
Monday	MP.5. Use appropriate tools strategically.
Tuesday	MP.5. Use appropriate tools strategically.
Wednesday	MP.5. Use appropriate tools strategically.
Thursday	MP.5. Use appropriate tools strategically.

Apr. 12/Week 12	<p><b>1.MP.5. Use appropriate tools strategically.</b> In first grade, students begin to consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, first graders decide it might be best to use colored chips to model an addition problem.</p> <p><b>2.MP.5. Use appropriate tools strategically.</b> In second grade, students consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be better suited. For instance, second graders may decide to solve a problem by drawing a picture rather than writing an equation.</p>
Monday	MP.5. Use appropriate tools strategically.
Tuesday	MP.5. Use appropriate tools strategically.
Wednesday	MP.5. Use appropriate tools strategically.

Thursday	MP.5. Use appropriate tools strategically.
Apr. 19/Week 13	<p><b>1.MP.7. Look for and make use of structure.</b> First graders begin to discern a pattern or structure. For instance, if students recognize <math>12 + 3 = 15</math>, then they also know <math>3 + 12 = 15</math>. (Commutative property of addition.) To add <math>4 + 6 + 4</math>, the first two numbers can be added to make a ten, so <math>4 + 6 + 4 = 10 + 4 = 14</math>.</p> <p><b>1.MP.8. Look for and express regularity in repeated reasoning.</b> In the early grades, students notice repetitive actions in counting and computation, etc. When children have multiple opportunities to add and subtract ten (and multiples of ten) they notice the pattern and gain a better understanding of place value. Students continually check their work by asking themselves, "Does this make sense?"</p> <p><b>2.MP.7. Look for and make use of structure.</b> Second graders look for patterns. For instance, they adopt mental math strategies based on patterns (making ten, fact families, doubles).</p> <p><b>2.MP.8. Look for and express regularity in repeated reasoning.</b> Students notice repetitive actions in counting and computation, etc. When children have multiple opportunities to add and subtract, they look for shortcuts, such as rounding up and then adjusting the answer to compensate for the rounding. Students continually check their work by asking themselves, "Does this make sense?"</p>
Monday	MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Tuesday	MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Wednesday	MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.
Thursday	MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.

Apr. 26/Week 14	<p><b>1.MP.7. Look for and make use of structure.</b> First graders begin to discern a pattern or structure. For instance, if students recognize <math>12 + 3 = 15</math>, then they also know <math>3 + 12 = 15</math>. (Commutative property of addition.) To add <math>4 + 6 + 4</math>, the first two numbers can be added to make a ten, so <math>4 + 6 + 4 = 10 + 4 = 14</math>.</p> <p><b>1.MP.8. Look for and express regularity in repeated reasoning.</b> In the early grades, students notice repetitive actions in counting and computation, etc. When children have multiple opportunities to add and subtract ten (and multiples of ten) they notice the pattern and gain a better understanding of place value. Students continually check their work by asking themselves, "Does this make sense?"</p> <p><b>2.MP.7. Look for and make use of structure.</b> Second graders look for patterns. For instance, they adopt mental math strategies based on patterns (making ten, fact families, doubles).</p> <p><b>2.MP.8. Look for and express regularity in repeated reasoning.</b> Students notice repetitive actions in counting and computation, etc. When children have multiple opportunities to add and subtract, they look for shortcuts, such as rounding up and then adjusting the answer to compensate for the rounding. Students continually check their work by asking themselves, "Does this make sense?"</p>
Monday	<p>MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Tuesday	<p>MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Wednesday	<p>MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>
Thursday	<p>MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.</p>

Nine PBS | Teaching in Room 9 | Mathematics | Grade 3 | Winter 2021

Jan. 11/Week 1	<b>3.DS.A Represent and Analyze Data</b>	<b>Lesson Plan</b>
Monday	3.DS.A.1 Create frequency tables, scaled picture graphs and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.	Notice and wonder about snowfall
Tuesday	3.DS.A.1 Create frequency tables, scaled picture graphs and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.	Bar graph snowfall
Wednesday	3.DS.A.1 Create frequency tables, scaled picture graphs and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.	Pictograph of snowfall
Thursday	3.DS.A.1 Create frequency tables, scaled picture graphs and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.	Questions about our snowfall data.

Jan. 18/Week 2	<b>3.DS.A Represent and Analyze Data</b>	
Monday	3.DS.A.1 Create frequency tables, scaled picture graphs, and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar	

	and/or picture graphs.
Tuesday	3.DS.A.1 Create frequency tables, scaled picture graphs, and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.
Wednesday	3.DS.A.1 Create frequency tables, scaled picture graphs, and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.
Thursday	3.DS.A.1 Create frequency tables, scaled picture graphs, and bar graphs to represent a data set with several categories. 3.DS.A.2 Solve one- and two-step problems using information presented in bar and/or picture graphs.

Jan. 25/Week 3	<b>3.DS.A Represent and Analyze Data</b>
Monday	3.DS.A.3 Create a line plot to represent data. 3.DS.A.4 Use data shown in a line plot to answer questions.
Tuesday	3.DS.A.3 Create a line plot to represent data. 3.DS.A.4 Use data shown in a line plot to answer questions.
Wednesday	3.DS.A.3 Create a line plot to represent data. 3.DS.A.4 Use data shown in a line plot to answer questions.
Thursday	3.DS.A.3 Create a line plot to represent data. 3.DS.A.4 Use data shown in a line plot to answer questions.

Feb. 1/Week 4	<b>3.RA.D. Use the four operations to solve word problems.</b>
Monday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.
Tuesday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.
Wednesday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and

	estimation strategies including rounding.
Thursday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.

Feb. 8/Week 5	<b>3.RA.D. Use the four operations to solve word problems.</b>
Monday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.
Tuesday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.
Wednesday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.
Thursday	3.RA.D.9 Write and solve two-step problems involving variables using any of the four operations. 3.RA.D.10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.

Feb. 15/Week 6	<b>3.GM.B.4-6 Solve problems involving the measurement of time.</b>
Monday	3.GM.B.4 Tell and write time to the nearest minute.
Tuesday	3.GM.B.4 Tell and write time to the nearest minute.
Wednesday	3.GM.B.4 Tell and write time to the nearest minute.
Thursday	3.GM.B.4 Tell and write time to the nearest minute.

<b>Feb. 22/Rebroadcast Week</b>
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Mar. 1/Week 7	<b>3.GM.B.4-6 Solve problems involving the measurement of time.</b>	<ul style="list-style-type: none"> <li>● The student will give an approximate elapsed time given a start time and an end time at least one or both of these times must be shown on an analog clock.</li> <li>● The student will choose an appropriate elapsed time interval given a particular situation.</li> <li>● The student will give a reasonable estimated interval of the passage of time within fifty-nine minutes.</li> </ul>
Monday	3.GM.B.5 Estimate time intervals in minutes.	<i>The class went to lunch at 12:30. Lunch takes about 25 minutes. About what time will lunch be finished?</i>
Tuesday	3.GM.B.5 Estimate time intervals in minutes.  Determine the interval	<i>Will it take more than 5 minutes or less than 5 minutes to read 5 chapters of a book?</i>
Wednesday	3.GM.B.5 Estimate time intervals in minutes.  Determine the start or end time.	<i>[show 11:20 on a clock] If we left now, about what time will we arrive in Chicago if it takes four hours to drive there?</i>
Thursday	3.GM.B.5 Estimate time intervals in minutes.	<i>[show a clock with 11:15 and another at 1:20] About how much time has passed?</i>

Mar. 8/Week 8	<b>3.GM.B.4-6 Solve problems involving the measurement of time.</b>	
Monday	3.GM.B.6 Solve problems involving addition and subtraction of minutes.	
Tuesday	3.GM.B.6 Solve problems involving addition and subtraction of minutes.	
Wednesday	3.GM.B.6 Solve problems involving addition and subtraction of minutes.	
Thursday	3.GM.B.6 Solve problems involving addition and subtraction of minutes.	

Mar. 15/Week 9	<b>3.MP.4. Model with mathematics.</b> Students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart, list, or graph, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed. Third graders should evaluate their results in the context of the situation and reflect on whether the results make sense.
Monday	3.MP.4. Model with mathematics.
Tuesday	3.MP.4. Model with mathematics.
Wednesday	3.MP.4. Model with mathematics.
Thursday	3.MP.4. Model with mathematics.

Mar. 22/Week 10	<b>3.MP.4. Model with mathematics.</b> Students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart, list, or graph, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed. Third graders should evaluate their results in the context of the situation and reflect on whether the results make sense.
Monday	3.MP.4. Model with mathematics.
Tuesday	3.MP.4. Model with mathematics.
Wednesday	3.MP.4. Model with mathematics.
Thursday	3.MP.4. Model with mathematics.

<b>Mar. 29/Rebroadcast Week</b>	
Apr. 5/Week 11	<b>3.MP.5. Use appropriate tools strategically.</b> Third graders consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, they may use graph paper to find all the possible rectangles that have a given perimeter. They compile the possibilities into an organized list or a table, and determine whether they have all the possible rectangles.
Monday	3.MP.5. Use appropriate tools strategically.
Tuesday	3.MP.5. Use appropriate tools strategically.

Wednesday	3.MP.5. Use appropriate tools strategically.
Thursday	3.MP.5. Use appropriate tools strategically.

Apr. 12/Week 12	<p><b>3.MP.5. Use appropriate tools strategically.</b> Third graders consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, they may use graph paper to find all the possible rectangles that have a given perimeter. They compile the possibilities into an organized list or a table, and determine whether they have all the possible rectangles.</p>
Monday	3.MP.5. Use appropriate tools strategically.
Tuesday	3.MP.5. Use appropriate tools strategically.
Wednesday	3.MP.5. Use appropriate tools strategically.
Thursday	3.MP.5. Use appropriate tools strategically.

Apr. 19/Week 13	<p><b>3.MP.7. Look for and make use of structure.</b> In third grade, students look closely to discover a pattern or structure. For instance, students use properties of operations as strategies to multiply and divide (commutative and distributive properties).</p> <p><b>3.MP.8. Look for and express regularity in repeated reasoning.</b> Students in third grade should notice repetitive actions in computation and look for more shortcut methods. For example, students may use the distributive property as a strategy for using products they know to solve products that they don't know. For example, if students are asked to find the product of <math>7 \times 8</math>, they might decompose 7 into 5 and 2 and then multiply <math>5 \times 8</math> and <math>2 \times 8</math> to arrive at <math>40 + 16</math> or 56. In addition, third graders continually evaluate their work by asking themselves, "Does this make sense?"</p>
Monday	3.MP.7. Look for and make use of structure. 3.MP.8. Look for and express regularity in repeated reasoning.
Tuesday	3.MP.7. Look for and make use of structure. 3.MP.8. Look for and express regularity in repeated reasoning.
Wednesday	3.MP.7. Look for and make use of structure. 3.MP.8. Look for and express regularity in repeated reasoning.
Thursday	3.MP.7. Look for and make use of structure. 3.MP.8. Look for and express regularity in repeated reasoning.

Apr. 26/Week 14	<p><b>3.MP.7. Look for and make use of structure.</b> In third grade, students look closely to discover a pattern or structure. For instance, students use properties of operations as strategies to multiply and divide (commutative and distributive properties).</p> <p><b>3.MP.8. Look for and express regularity in repeated reasoning.</b> Students in third grade should notice repetitive actions in computation and look for more shortcut methods. For example, students may use the distributive property as a strategy for using products they know to solve products that they don't know. For example, if students are asked to find the product of <math>7 \times 8</math>, they might decompose 7 into 5 and 2 and then multiply <math>5 \times 8</math> and <math>2 \times 8</math> to arrive at <math>40 + 16</math> or 56. In addition, third graders continually evaluate their work by asking themselves, "Does this make sense?"</p>
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Thursday	<p>3.MP.7. Look for and make use of structure. 3.MP.8. Look for and express regularity in repeated reasoning.</p>

### Math Practice Standards by Grade Level

#### **K.MP.1. Make sense of problems and persevere in solving them.**

In Kindergarten, students begin to build the understanding that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. Younger students may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, "Does this make sense?" or they may try another strategy.

#### **K.MP.2. Reason abstractly and quantitatively.**

Younger students begin to recognize that a number represents a specific quantity. Then, they connect the quantity to written symbols. Quantitative reasoning entails creating a representation of a problem while attending to the meanings of the quantities.

#### **K.MP.3. Construct viable arguments and critique the reasoning of others.**

Younger students construct arguments using concrete referents, such as objects, pictures, drawings, and actions. They also begin to develop their mathematical communication skills as they participate in mathematical discussions involving questions like "How did you get that?" and

“Why is that true?” They explain their thinking to others and respond to others’ thinking.

**K.MP.4. Model with mathematics.**

In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.

**K.MP.5. Use appropriate tools strategically.**

Younger students begin to consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, kindergarteners may decide that it might be advantageous to use linking cubes to represent two quantities and then compare the two representations side-by-side.

**K.MP.6. Attend to precision.**

As kindergarteners begin to develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and in their own reasoning.

**K.MP.7. Look for and make use of structure.**

Younger students begin to discern a pattern or structure. For instance, students recognize the pattern that exists in the teen numbers; every teen number is written with a 1 (representing one ten) and ends with the digit that is first stated. They also recognize that  $3 + 2 = 5$  and  $2 + 3 = 5$ .

**K.MP.8. Look for and express regularity in repeated reasoning.**

In the early grades, students notice repetitive actions in counting and computation, etc. For example, they may notice that the next number in a counting sequence is one more. When counting by tens, the next number in the sequence is “ten more” (or one more group of ten). In addition, students continually check their work by asking themselves, “Does this make sense?”

**1.MP.1. Make sense of problems and persevere in solving them.**

In first grade, students realize that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. Younger students may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, “Does this make sense?” They are willing to try other approaches.

**1.MP.2. Reason abstractly and quantitatively.**

Younger students recognize that a number represents a specific quantity. They connect the quantity to written symbols. Quantitative reasoning entails creating a representation of a problem while attending to the meanings of the quantities.

**1.MP.3. Construct viable arguments and critique the reasoning of others.**

First graders construct arguments using concrete referents, such as objects, pictures, drawings, and actions. They also practice their mathematical communication skills as they participate in mathematical discussions involving questions like How did you get that? Explain your thinking, and Why is that true? They not only explain their own thinking, but listen to others' explanations. They decide if the explanations make sense and ask questions.

**1.MP.4. Model with mathematics.**

In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.

**1.MP.5. Use appropriate tools strategically.**

In first grade, students begin to consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, first graders decide it might be best to use colored chips to model an addition problem.

**1.MP.6. Attend to precision.**

As young children begin to develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and when they explain their own reasoning.

**1.MP.7. Look for and make use of structure.**

First graders begin to discern a pattern or structure. For instance, if students recognize  $12 + 3 = 15$ , then they also know  $3 + 12 = 15$ . (Commutative property of addition.) To add  $4 + 6 + 4$ , the first two numbers can be added to make a ten, so  $4 + 6 + 4 = 10 + 4 = 14$ .

**1.MP.8. Look for and express regularity in repeated reasoning.**

In the early grades, students notice repetitive actions in counting and computation, etc. When children have multiple opportunities to add and subtract ten (and multiples of ten), they notice the pattern and gain a better understanding of place value. Students continually check their work by asking themselves, "Does this make sense?"

**2.MP.1. Make sense of problems and persevere in solving them.**

In second grade, students realize that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. They may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, "Does this make sense?" They make conjectures about the solution and plan out a problem-solving approach.

### **2.MP.2. Reason abstractly and quantitatively.**

Younger students recognize that a number represents a specific quantity. They connect the quantity to written symbols. Quantitative reasoning entails creating a representation of a problem while attending to the meanings of the quantities. Second graders begin to know and use different properties of operations and relate addition and subtraction to length.

### **2.MP.3. Construct viable arguments and critique the reasoning of others.**

Second graders may construct arguments using concrete referents, such as objects, pictures, drawings, and actions. They practice their mathematical communication skills as they participate in mathematical discussions involving questions like, “How did you get that?,” “Explain your thinking,” and “Why is that true?” They not only explain their own thinking, but listen to others’ explanations. They decide if the explanations make sense and ask appropriate questions.

### **2.MP.4. Model with mathematics.**

In early grades, students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed.

### **2.MP.5. Use appropriate tools strategically.**

In second grade, students consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be better suited. For instance, second graders may decide to solve a problem by drawing a picture rather than writing an equation.

### **2.MP.6. Attend to precision.**

As children begin to develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and when they explain their own reasoning.

### **2.MP.7. Look for and make use of structure.**

Second graders look for patterns. For instance, they adopt mental math strategies based on patterns (making ten, fact families, doubles).

### **2.MP.8. Look for and express regularity in repeated reasoning.**

Students notice repetitive actions in counting and computation, etc. When children have multiple opportunities to add and subtract, they look for shortcuts, such as rounding up and then adjusting the answer to compensate for the rounding. Students continually check their work by asking themselves, “Does this make sense?”

### **3.MP.1. Make sense of problems and persevere in solving them.**

In third grade, students know that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve

it. Third graders may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, “Does this make sense?” They listen to the strategies of others and will try different approaches. They often will use another method to check their answers.

**3.MP.2. Reason abstractly and quantitatively.**

Third graders should recognize that a number represents a specific quantity. They connect the quantity to written symbols and create a logical representation of the problem at hand, considering both the appropriate units involved and the meaning of quantities.

**3.MP.3. Construct viable arguments and critique the reasoning of others.**

In third grade, students may construct arguments using concrete referents, such as objects, pictures, and drawings. They refine their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” They explain their thinking to others and respond to others’ thinking.

**3.MP.4. Model with mathematics.**

Students experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart, list, or graph, creating equations, etc. Students need opportunities to connect the different representations and explain the connections. They should be able to use all of these representations as needed. Third graders should evaluate their results in the context of the situation and reflect on whether the results make sense.

**3.MP.5. Use appropriate tools strategically.**

Third graders consider the available tools (including estimation) when solving a mathematical problem and decide when certain tools might be helpful. For instance, they may use graph paper to find all the possible rectangles that have a given perimeter. They compile the possibilities into an organized list or a table and determine whether they have all the possible rectangles.

**3.MP.6. Attend to precision.**

As third graders develop their mathematical communication skills, they try to use clear and precise language in their discussions with others and in their own reasoning. They are careful about specifying units of measure and state the meaning of the symbols they choose. For instance, when figuring out the area of a rectangle they record their answers in square units.

**3.MP.7. Look for and make use of structure.**

In third grade, students look closely to discover a pattern or structure. For instance, students use properties of operations as strategies to multiply and divide (commutative and distributive properties).

**3.MP.8. Look for and express regularity in repeated reasoning.**

Students in third grade should notice repetitive actions in computation and look for more shortcut methods. For example, students may use the distributive property as a strategy for using products they know to solve products that they don't know. For example, if students are asked to find the product of  $7 \times 8$ , they might decompose 7 into 5 and 2 and then multiply  $5 \times 8$  and  $2 \times 8$  to arrive at  $40 + 16$  or 56. In addition, third graders continually evaluate their work by asking themselves, "Does this make sense?"